WHAT IS CLAIMED IS:

1. A method of image processing, comprising the steps of:

comparing in a first comparison an image edge profile representative of the sharpness of an image and an aim edge profile representative of a desired sharpness of said image; and

generating a sharpness filter in dependence on said first comparison.

2. A method according to claim 1, further comprising the step of applying said sharpness filter to the image to obtain a sharpened image.

3. A method according to claim 2, further comprising the step of generating an edge profile representative of the sharpness of the sharpened image and modifying the sharpness filter in dependence on a subsequent comparison between said generated edge profile representative of the sharpness of the sharpened image and the aim edge profile.

4. A method according to claim 3, comprising iteratively repeating the steps of generating an edge profile representative of the sharpness of the sharpened image and modifying said sharpness filter in dependence on subsequent comparisons between a most recently generated edge profile representative of the sharpness of the sharpened image and the aim edge profile until the sharpness filter is substantially unity at all frequencies.

5. A method according to claim 2, comprising the steps of:

generating an edge profile representative of the sharpness of the sharpened image; and

comparing said edge profile representative of the sharpness of the sharpened image with the aim edge profile to determine whether or not the sharpened image is sufficiently sharp.

6. A method according to claim 2, in which said first comparison comprises the steps of:

transforming the image edge profile representative of the sharpness of the image and the aim edge profile representative of the desired sharpness of said image into frequency space to obtain frequency spectra representative of said profiles;

fitting envelopes to the obtained spectra; and

dividing the spectrum corresponding to the image edge profile into the spectrum corresponding to the aim edge profile to generate a target spectrum.

7. A method according to claim 6, in which the step of generating a sharpness filter in dependence on said comparison comprises the step of inputting the target spectrum to a filter design method.

8. A method according to claim 7, in which the filter design method is selected from the group consisting of frequency sampling, least squares and weighted least squares.

9. A method according to claim 1, in which the aim edge profile is a viewer's edge shape preference.

10. A method according to claim 1, in which the aim edge profile is a modified viewer's edge shape preference, adapted to compensate for the MTF function of an output device from which an output format of the image will be produced.

11. A method according to claim 6, further comprising the step of modifying the target spectrum to control noise in the sharpened image.

12. A method according to claim 11, in which the modification comprises clipping the gain of the target spectrum at a maximum value, thereby limiting noise build-up in the sharpened image.

13. A method according to claim 12, in which after the target spectrum has been clipped, the gain is reduced to a target value.

14. A method according to claim 11, in which the target spectrum is modified with reference to a noise estimation method to control noise in the sharpened image.

15. A method according to claim 10, in which the adaptation of the aim edge profile comprises adding a high frequency component to the viewer's edge shape preference.

16. A method according to claim 6, comprising scaling the frequency spectra representative of each of said image edge profile and the aim edge profile.

17. A processor adapted to compare, in a first comparison, an image edge profile representative of the sharpness of an image and an aim edge profile representative of a desired sharpness of said image; and

generate a sharpness filter in dependence on said first comparison.

18. A computer program product, which when run on a computer causes said computer to execute the steps of claim 1.